Remarks

By this amendment, Claims 1, 6, 7, and 9 are amended. Claims 8 is canceled. Claim 2-5, and 10-14 are withdrawn, but maintained for possible entry of appropriate amendments. Claim 1-7, and 9-14 are pending in this application. No issue of new matter arises.

Response to 35 U.S.C. § 101

> The Examiner rejected Claims 1, 6, and 7 under 35 U.S.C. 101 "because the claimed invention is directed to non-statutory subject matter. Claim 1 does not require any active steps and only requires a single mental step..... The claimed invention does not fall into any of the categories of patentable subject matter set forth in § 101. It is not a proper process as it does not require any steps. Claims 6 and 7 both depend from claim 1 but do not recite any additional steps, such as contacting a candidate compound with a cell, which appears in claim 8."

To overcome the above rejection, Applicants respectfully amend Claim 1, add subject matter of Claim 8 to Claim 1 and cancel Claim 8. Claims 6, 7 and 9 depend on Claim 1. No new matter has been added by these amendments. Support for these amendments can be found, for example, previous claim sets. Applicants submit that the claims, as amended to obviate this rejection, and respectfully request that the Examiner withdraw the rejection under that section.

Response to 35 U.S.C. § 112 requirement

> The Examiner rejected Claims 1 and 6 - 9 under 35 U.S.C. § 112, *first paragraph,* alleging that "the specification, while being enabling for cellular assays which measure the degree of tyrosine kinase activity, does not reasonably provide enablement for measurement of all types of Src activity as broadly claimed in Claim 8, or for all modes of "identifying" therapeutic agents, which is encompassed by claims 1 and 6 - 7....."

In response the Examiner's rejection 35 U.S.C. § 112, *first paragraph,* Applicants change "the activity of said Src protein" to "the phosphorylation activity of said Src protein". Support for these amendments can be found, for example, on page 4, line 15-28. No new matter has been added by these amendments. Applicants respectfully submit that the claims, as amended, comport with the requirements of § 112, *first paragraph,* and respectfully request that the Examiner withdraw the rejection under that section.

Response to 35 U.S.C. § 102 requirement

> The Examiner rejected Claim 1 under 35 U.S.C. 102(b) as "being anticipated by Maly et al. (2000, Prac Nail Acad Sci USA 97:2419 - 2424). 'Maly teaches assays for identification of Src inhibitors. See for example the paragraph spanning pp. 2421 - 2422, which teaches all steps of the assay. Figure 3 of the article shows the degree of inhibition of Src kinase activity for each of 305 compounds tested.... "

The Applicants respectfully traverse this rejection. Maly et al. describes the identification of Src inhibitors, but doesn't disclosed any link between Src and Alzheimer's disease. Applicants point out that claimed invention is a method for identifying a therapeutic compound for the treatment of Alzheimer's disease. Withdrawal of this rejection is respectfully requested.

> Claims 1 and 6 - 8 are rejected under 35 U.S.C. 102(b) as being anticipated by Tang et al. (WO 02122660, published 21 March 2002). Tang et al. teach screening assays for a number of proteins. The proteins are identified by SEQ ID NO:, Tang's SEQ ID NO:607 is identical to applicant's SEQ ID NO:1 (see enclosed alignment). Tang teaches assays to identify compounds which decrease the activity of the protein. See Tang, p. 56, particularly the second complete paragraph which teaches that the test compounds can "be screened for ability to bind or modulate (i.e., increase or decrease) the activity of polypeptides of the invention".

The Applicants respectfully traverse this rejection. Although Tang et al. discloses the homologous sequence of SEQ ID NO: 1 of this application, it does not give any experimental data in Tang et al. for this particular protein. Although Tang et al. teaches any of 444 proteins can be used for various purposes including screening for inhibitors, it does not give any detail on how to practice such screening of Src. Tang et al. only generally mentions Alzheimer's disease concerning all proteins it discloses, it does not link Src protein to Alzheimer's disease in particularity. Tang at al. does not teach a method of screening a Src protein for identifying a therapeutic compound for the treatment of Alzheimer's disease. The artisan skilled in the field would have found no motivation to use specifically the protein having SEQ ID NO: 607 among a large number of other proteins for identifying a therapeutic compound for the treatment of Alzheimer's disease. Therefore, withdrawal of this rejection is respectfully requested.

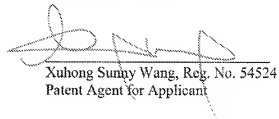
Response to 35 U.S.C. § 103 requirement

> Claims 1 and 6 - 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tang et al. (WO 02122660, published 21 March 2002). The reasons why Tang anticipates claims 1 and 6 - 8 are set forth in the rejection under 35 USC 102 (b) above. Briefly, Tang teaches methods of identifying inhibitors of applicant's SEQ ID NO: 1 and teaches every step of the method of claim 8. Tang teaches that the host cells, which can be used in the screening assay, can be of essentially any cell type. See p. 25, second complete paragraph. Tang teaches that primary tissue culture can be used (p. 26, line 2). Tang also teaches that the polypeptides of the invention are involved in nervous system disorders and compounds which modulate the proteins' activity can be used in treatment of many neurological diseases, including Alzheimer's disease. See p. 59. However Tang does not teach the screening method wherein the cells provided are a primary culture of neurons, as recited in claim 9.

Tang at al. discloses 444 nucleotide acids and 444 polypeptides with broad general disclosure of host cells, screening assays and pharmaceutical usage. There are no particular examples or experimental data for a method of screening a Src protein for identifying a therapeutic compound for the treatment of Alzheimer's disease, which we claimed in this invention. Disclosure of a genus does not make all species within it obvious as previous cases suggested. For example, in the case of "In re Jones" (958 F.2d 347; C.A.Fed.,1992), the Federal Circuit Court of Appeals decided that a novel ammonium salt of a known herbicidal compound was patentable despite the prior publication of the genus of ammonia salts of the compound and specific discussion of certain of them. Furthermore, in the case of "In re Baird" (16 F.3d 380; C.A.Fed.,1994), the Federal Circuit further built on the Jones decision stating this as precedent for the proposition that "The fact that a claimed compound may be encompassed by (prior) disclosed generic formula does not by itself render that compound obvious". No example is giving in Tang at al. using the invention Applicants claimed. It would not have been obvious for a person skilled in the art to work out all thousands of combinations for "particular one of 444 protein using an workable screening method to identify a therapeutic compound for the treatment of Alzheimer's disease". Thus, it is believed that this rejection has been overcome. Withdrawal of this rejection is respectively requested.

The Applicants respectfully submit that the claims, as amended, are in condition for allowance, and remarks to fully respond the Office Action of July 10, 2006, and respectfully request early, favorable action on the application. Should the Examiner believe that an interview would advance the prosecution of this application, the Applicants invite him to contact the undersigned at 908.231.3648.

Respectfully submitted,



Xuhong Sunny Wang, Reg. No. 54524
Patent Agent for Applicant

sanofi-aventis. U.S. LLC
Patent Department
Route #202-206 / P.O. Box 6800
Bridgewater, NJ 08807
Telephone (908) 231-**3648**
Telefax (908) 231-2626

Docket No. FRAV2002/0030 US NP